

## SIGNIFICANCE OF VIRTUAL LEARNING ENVIRONMENT IN INDIAN EDUCATION SYSTEM

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### ABSTRACT

A Virtual Learning Environment (VLE) is a system that creates an interactive educational experience, usually involving student-to-student and student-to-teacher interaction. The main purpose of a VLE is to provide an online space where students can access course materials, submit assignments, and receive feedback from their instructors. A VLE may also include features such as discussion boards, chat rooms, and video conferencing to facilitate collaboration and communication among students. While VLEs are most commonly used in higher education, they are also being used more frequently in K-12 classrooms. As the use of technology in education continues to grow, VLEs will likely become even more prevalent in schools. The present study is aimed at to study the significance of virtual learning environment in Indian education system with reference to higher education. To achieve the objectives the study researcher collected the data from 460 respondents (teachers and students) from Pune city. The findings of this study will help education sector to implement virtual learning environment in the best effective way.

**Keywords:** Virtual Learning Environment, Higher Education, Management Education, etc.

### Introduction

#### Concept of Virtual Learning Environment

A virtual learning environment (VLE) is a system that creates an interactive, online space in which learners and educators can access educational resources, communicate with each other, and track progress. VLEs are typically used in schools and universities as a way to deliver courses and support collaboration between students and teachers. However, they can also be used in workplace training or by any organization that wants to provide its members with online learning opportunities.

There are many different types of VLEs available, ranging from simple platforms that only provide basic course materials to more robust systems that include features such as forums, chat rooms, and video conferencing. Some VLEs are open source and can be downloaded and installed on a server, while others are hosted by commercial providers.

#### Importance of Virtual Learning Environment

A virtual learning environment (VLE) is a system that creates an interactive, online space in which teachers and learners can access educational resources, communicate with each other, and collaborate on projects.

A VLE can be used for a wide variety of purposes, including:

- Providing learners with access to course materials and resources
- Facilitating communication and collaboration between learners and between teachers and learners
- Supporting assessment and feedback processes
- Enabling the delivery of courses and programmes entirely online

There are many different types of VLEs available, ranging from simple platforms that provide basic functionality to complex systems that offer a wealth of features and tools. The important thing is to choose a VLE that is fit for purpose and meets the needs of your organisation or institution.

#### Present and Future Scenario of Virtual Learning Environment

The current situation is that many students are enrolled in virtual learning environments, or VLEs. In a VLE, students can access their course materials and interact with their instructors and classmates online. This type of learning environment has several advantages, including the ability to tailor the learning experience to the individual learner, the flexibility to learn at one's own pace, and the convenience of being able to access courses from anywhere in the world.

Looking to the future, it is likely that VLEs will become even more popular as they continue to evolve and become more user-friendly. Additionally, as more institutions begin to offer online courses, the need for VLEs will increase. As a result, we can expect to see more innovative features and capabilities added to VLEs in order to meet the needs of both students and instructors.

### **Tips for using Virtual Learning Environment**

If you're new to using a virtual learning environment (VLE), there are a few things you should keep in mind to make the most of it. Here are some tips:

1. Get familiar with the interface and navigation

Spend some time exploring the VLE and getting comfortable with how it works. This will make it easier to find what you need when you're trying to use it for class.

2. Take advantage of all the features

A VLE can offer a lot, from discussions and forums to multimedia content and collaboration tools. Be sure to check out all the features your VLE has to offer so you can get the most out of it.

3. Stay organized

It's easy to get lost in a VLE if you're not careful. Stay organized by creating folders for each class or subject, and adding relevant files and resources into each one. That way, you can always find what you need when you need it.

4. Keep up with announcements and updates

Your VLE will likely have a announcements section where updates and important information will be posted. Be sure to check this regularly so you don't miss anything important!

5. Participate in discussions and forums

An active participation in discussions and forums is often expected in a VLE-based course. Don't be afraid to contribute - it's a great way to learn from others and get involved in the course material

### **Strategies to Apply Virtual Learning Environment**

There are many strategies that can be used in a virtual learning environment to engage students and promote learning. Some of these strategies include:

- Using multimedia resources such as videos, images, and audio to enhance learning
- Creating opportunities for collaboration and interaction between students
- Utilizing tools such as forums, chat rooms, and blogs to encourage communication
- Designing engaging and interactive activities and assessments
- Providing clear and concise instructions to guide students through the learning process

By using these strategies, educators can create a virtual learning environment that is both effective and enjoyable for students.

### **Challenges while applying Virtual Learning Environment**

The challenges of virtual learning environments are numerous. First, there is the issue of access. Not all students have access to a computer or the internet at home, which can limit their ability to participate in online learning. Additionally, online learning can be isolating for some students, as they may not have the opportunity to interact with their peers and teacher in person. Another challenge of virtual learning environments is that they can be distracting. Students may be tempted to check social media or play games instead of paying attention to the lesson. Additionally, it can be difficult for teachers to keep students engaged in an online setting. Finally, there is the question of assessment. It can be difficult to assess student learning in an online environment, as there is no face-to-face interaction and limited opportunities for formative assessment.

### **Opportunities in Virtual Learning Environment**

There are many opportunities that a virtual learning environment can offer. For example, it can allow students to have more control over their learning. They can pause, rewind, and review material as often as they need to. It can also provide a more engaging and interactive learning experience. Additionally, a virtual learning environment can allow for a more flexible schedule since students can access the material at any time and from anywhere.

### **Virtual Learning Environment in Management Education**

In management education, a virtual learning environment (VLE) is a type of online learning platform that allows students to access course materials and resources, submit assignments, and communicate with their instructors and classmates. VLEs are often used in distance learning or blended learning programs, where students may not have the opportunity to meet in person on a regular basis.

The use of VLEs in management education can provide several benefits for both students and instructors. For students, VLEs can provide 24/7 access to course materials, which can be particularly helpful for those who have busy schedules or who are located in different time zones. Additionally, VLEs can allow for more flexibility in terms of when and where learners can complete their work. And finally, VLEs can facilitate communication and collaboration between students and instructors, as well as between classmates. There are a number of different software platforms that can be used to create a VLE. Some popular options include Blackboard Learn, Moodle,

Canvas, and Google Classroom. When selecting a platform for your VLE, it is important to consider the needs of your specific course or program as well as the preferences of your students.

### Literature Review

VLE system is established on the Internet, it doesn't require any other kind of communication to provide the courses. Additionally, there won't be any significant costs associated with creating a unique, high performance network to provide these courses. Since any Internet browser that supports HTML forms can be used as the frontend, any machine with an Internet connection can access the VLE system Kumar, Raj Pakala, r. K. Ragade, j. P. Wong (1998).

As a collection of interconnected systems with properties like a planned information space, a social space that is a "place," and players who are active and present actors, we termed a "virtual learning environment" (VLE). We contend that taking advantage of a virtual learning environment does not automatically ensure efficacy. Rich pedagogical scenarios must be integrated with it, and these scenarios must profit from its numerous assisting aspects. It runs the risk of missing intriguing areas of study and development that may and should enhance education if the "virtual learning environment" concept is applied to any type of Internet technology (traditional Web sites, learning management systems, 3D environments, etc.). (Pierre Dillenbourg, Daniel Schneider, Paraskevi Synteta, 2002). According to the study, the VLE has a substantial impact on students' success on the Design Project in the final year of the BEng Civil Engineering programme at Loughborough University, but a negligible impact on their academic achievement in the Geotechnics 3 module. The use of VLE and academic performance exhibit insignificant correlations according to Spearman's and Pearson's correlation coefficients Peter Demian (2015).

The advantages of these VLE outweigh the drawbacks for both students and institutions by a wide margin. The student can internalise knowledge and build problem-solving skills through context-rich guided learning, which can then be applied in the real world. Virtual learning environments are certain to expand in the future because to the falling cost of technology and the increasing technical expertise within educational institutions Arvind Mahajan (2016).

The Influence of Virtual Learning Environments in Students' Performance," they mentioned that, we provide a summary of the key findings from a study that involved 6347 undergraduate students from a Portuguese public higher education institution and was conducted over the academic year 2014–2015. This study sought to determine how frequently students used the virtual learning environment (VLE) that the institution had implemented, as well as the relationship between that frequency and the students' academic achievement. The study was quantitative in nature, and the data came from databases linked to the VLE.

Students are encouraged to learn new things in a virtual learning environment thanks to their involvement in Moodle. When using Moodle to help students learn a language, it's crucial to make sure that the students are aware of the opportunities and the importance of this type of learning, which can help them become more competent and self-aware, value lifelong learning, and develop their life skills. Teachers must explain to pupils the goals, the expected learning outcomes, how to recognise the learning outcomes, and the tactics and approaches to be applied when learning occurs in order to attain these results, Dalia Gulbinskiene et.al (2017). Students' lives have been easier and more understandable thanks to virtual learning settings. In educomp, the complicated theories have become simple to understand. Concepts and experiments have gotten a lot simpler to understand. The results of the practical exam have significantly improved. Recalling the topics has been simple for the students. Students now find studying science to be exciting with the development of virtual learning environments. Even the aversion to math and science has diminished, Amritesh PS, Jeayaram Subramanian (2019).

College teachers prefer using blended learning environments, which combine traditional face-to-face instruction with online learning. They do not advocate using purely online learning environments or entirely face-to-face instruction. It is important to note that the majority of Iraqi college professors believe that virtual learning can improve students' autonomy in studying but may have a detrimental impact on their relationships with their professors, LiqaaHabeb Al-Obaydi (2020).

Institutions would be required to ensure that research reflects areas of need in communities if educational research has an ethical component. It is our intention that this scoping study will offer a small window into the state of research on student mental health in VLE settings while also highlighting the necessity of new research projects in the K–12 arena. As things stand, there's a good chance that K–12 students are using VLE

implementations that don't actively embrace the features of a VLE that offers sound best practises and supports the requirements of kids with regard to their mental health Aura Caprara,Cataldo Caprara (2021).

There are the three main conclusions from the views of professors and RUB students on the usefulness of the VLE for online TLA: (a) The CA are more skilled than the CS at using VLE features for online TLA. The presence of a reliable network, timely internal workshops, prior exposure to fundamental VLE elements, and ICT knowledge are the variables that have strengthened their competencies. However, the majority of students had issues when taking online classes. Their inability to actively learn is hampered by unstable networks, inconsistent power supplies, poor study conditions, a lack of financial support, and technical difficulties. However, with help from friends, teachers, and family, the majority of students were able to overcome these obstacles, Ugyen Pem et.al (2021).

## Research Methodology

### Objectives of the study

- To study the concept of Virtual Learning Environment.
- To study the importance of virtual learning environment in higher education system of India.
- To study the opinion of teachers and students about Awareness, Usage, Ease of implementation and effectiveness of Virtual Learning Environment.

### Scope of the study

- The present study is related to only Private and State Universities in Pune.
- The present study related to only three educational wings, MBA, MCA and Engineering.

### Reliability Test

	Cronbach's alpha
Q1	0.830
Q2	0.870

As the Cronbach alpha observed is more than 0.700 for both the questionnaire, the questionnaires are considered as valid.

### Sampling Technique

The researchers have collected the data using survey method from 460 respondents with the help of convenience sampling method.

	State Universities	Private Universities
MBA		
Teachers	20	20
Students	50	50
MCA		
Teachers	20	20
Students	40	40
Engineering		
Teachers	30	30
Students	70	70
	230	230

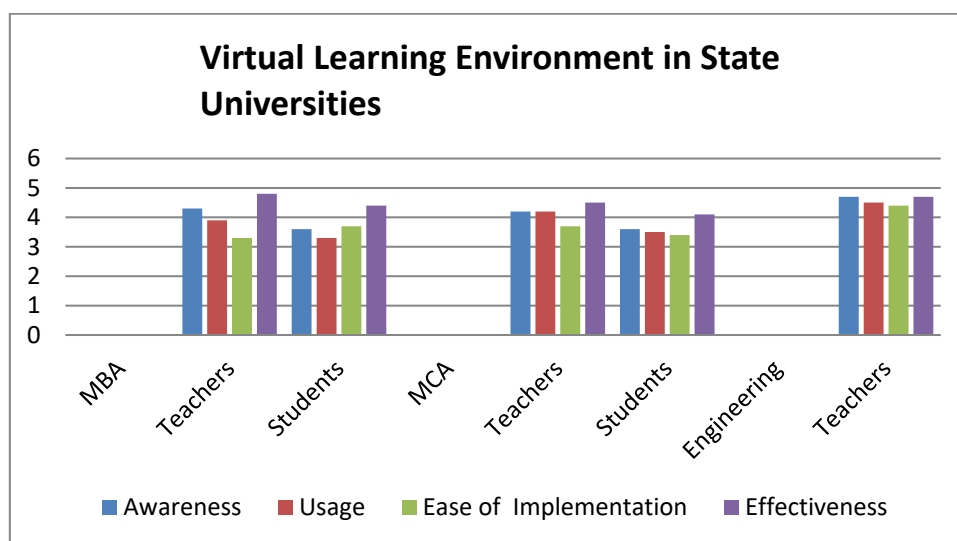
### Data Analysis

Measurement tool: 5 point Rating Scale

	1	2	3	4	5
Awareness	Very low awareness	Low awareness	average	High Awareness	Very high awareness
Usage	Very low usage	Low usage	average	High usage	Very high usage
Ease of Implementation	Very difficult	Difficult	average	Easy	Very easy
Effectiveness	Very less effective	Less effective	average	Highly effective	Very high effect

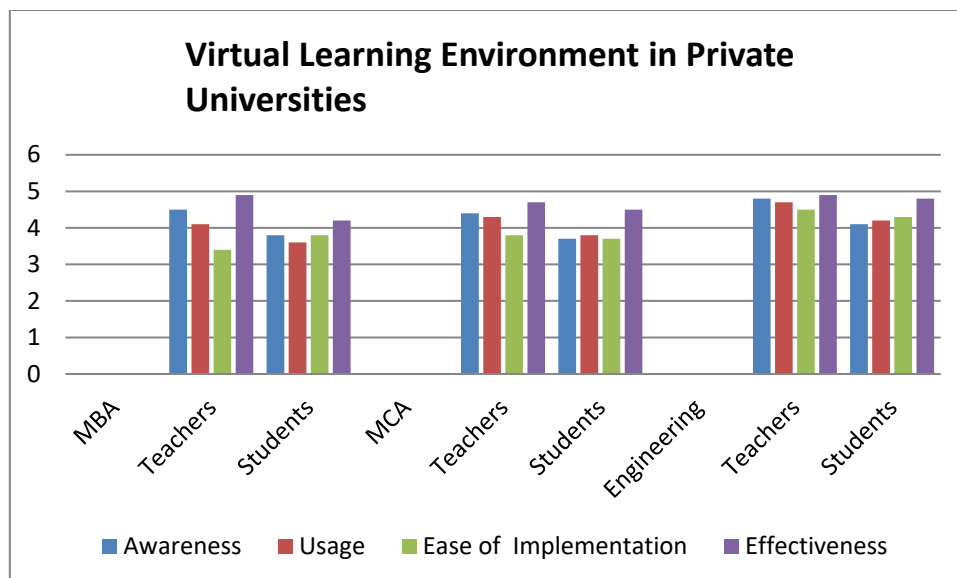
### Virtual Learning Environment in Private Universities

	Awareness	Usage	Ease of Implementation	Effectiveness
MBA				
Teachers	4.3	3.9	3.3	4.8
Students	3.6	3.3	3.7	4.4
MCA				
Teachers	4.2	4.2	3.7	4.5
Students	3.6	3.5	3.4	4.1
Engineering				
Teachers	4.7	4.5	4.4	4.7
Students	3.9	4.1	4.2	4.6



### Virtual Learning Environment in Private Universities

	Awareness	Usage	Ease of Implementation	Effectiveness
MBA				
Teachers	4.5	4.1	3.4	4.9
Students	3.8	3.6	3.8	4.2
MCA				
Teachers	4.4	4.3	3.8	4.7
Students	3.7	3.8	3.7	4.5
Engineering				
Teachers	4.8	4.7	4.5	4.9
Students	4.1	4.2	4.3	4.8



### Conclusion

From the present study it is observed that both private universities and state universities teachers and students are agreed that virtual learning environment is important for their academic curriculum.

### Contribution to Industry

This research study will be helpful to education sector to design new strategies related to virtual learning environment which will be beneficial to improve academic performance.

### Contribution to Academicians

This research study will be helpful to teachers to implement virtual learning environment in the best effective way.

### Contribution to Students

This research study will be helpful to students to understand the concepts related to virtual learning environment etc

### Scope for the further research study

There is also a further scope for the research on the topics like e learning, blended learning, online education, digital education etc.

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